

Inventor
Search

L1 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772629 CAPLUS
 DOCUMENT NUMBER: 133:340315
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Browne, Christine Marie; Coakley, Timothy G.; Giles, Robert Gordon; Morrissey, Gillian
 PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK; SmithKline Beecham (Cork) Limited
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-12
 SECONDARY: A61K031-44; A61P003-10
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 Section cross-reference(s): 1
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064896	A1	20001102	WO 2000-GB1520	20000419
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173435	A1	20020123	EP 2000-920892	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009932	A	20020409	BR 2000-9932	20000419
JP 2002543077	T2	20021217	JP 2000-614248	20000419
EP 1304330	A2	20030423	EP 2002-80321	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005147	A	20011217	NO 2001-5147	20011022
HR 20010772	A1	20021031	HR 2001-772	20011022
BG 106121	A	20020531	BG 2001-106121	20011120
PRIORITY APPLN. INFO.:			GB 1999-9473	A 19990423
			GB 1999-12196	A 19990525
			EP 2000-920892	A3 20000419
			WO 2000-GB1520	W 20000419

ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an IR spectrum contg. peaks at 1763, 912, 856 and 709 cm⁻¹; and/or (ii) a Raman spectrum contg. peaks at 1762, 1284, 912 and 888 cm⁻¹; and/or (iii) a solid-state ¹³C NMR spectrum contg. peaks at 111.0, 113.6, 119.8, 129.1, 130.9, 131.8, 134.7, 138.7, 146.5, 152.7, 157.5, 169.5, 171.0, 178.7 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives

calcd. lattice spacings at 5.87, 5.30, 4.69, 4.09, 3.88, 3.61, 3.53 and 3.46 Angstroms; a process for prep. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
IR spectroscopy
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action and properties of polymorphic form
of [(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin
edione maleate)
INDEX TERM: 155141-29-0
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action and properties of polymorphic form
of [(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin
edione maleate)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD.
REFERENCE(S): (1) Halebian, J; JOURNAL OF PHARMACEUTICAL SCIENCES 1969,
V58(8), P911 CAPLUS
(2) Smithkline Beecham Plc; WO 9405659 A 1994 CAPLUS
(3) Smithkline Beecham Plc; WO 9855122 A 1998 CAPLUS
(4) Smithkline Beecham Plc; WO 9931093 A 1999 CAPLUS

L1 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772627 CAPLUS
 DOCUMENT NUMBER: 133:340314
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Moore, Stephen; Sasse, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-00
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 Section cross-reference(s): 1
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064893	A2	20001102	WO 2000-GB1522	20000419
WO 2000064893	A3	20010125		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1175418	A2	20020130	EP 2000-922793	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009935	A	20020416	BR 2000-9935	20000419
JP 2002543076	T2	20021217	JP 2000-614245	20000419
EP 1277753	A1	20030122	EP 2002-80319	20000419
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NO 2001005148	A	20011217	NO 2001-5148	20011022
HR 20010774	A1	20021031	HR 2001-774	20011022
BG 106122	A	20020531	BG 2001-106122	20011120
PRIORITY APPLN. INFO.:			GB 1999-9471	A 19990423
			GB 1999-12195	A 19990525
			EP 2000-922793	A3 20000419
			WO 2000-GB1522	W 20000419

ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an infra red spectrum contg. peaks at 1752, 1546, 1154, 621, and 602 cm⁻¹; and/or (ii) a Raman spectrum contg. peaks at 1751, 1243 and 602 cm⁻¹; and/or (iii) a solid-state NMR spectrum contg. peaks at 111.9, 114.8, 119.6, 129.2, 134.0, 138.0, 144.7, 153.2, 157.1, 170.7, 172.0 and 175.0 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives calcd. lattice spacings of 6.46, 5.39, 4.83, 4.68, 3.71, 3.63, 3.58, and 3.48 Angstroms; a process for prep. such a compd., a pharmaceutical compn. contg.

such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)
INDEX TERM: 168553-12-6
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)

L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772626 CAPLUS
 DOCUMENT NUMBER: 133:340313
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Sasse, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-00
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064892	A2	20001102	WO 2000-GB1514	20000419
WO 2000064892	A3	20010125		
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173434	A2	20020123	EP 2000-920889	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009934	A	20020604	BR 2000-9934	20000419
JP 2002543075	T2	20021217	JP 2000-614244	20000419
EP 1284268	A1	20030219	EP 2002-80320	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005149	A	20011217	NO 2001-5149	20011022
HR 20010773	A1	20021031	HR 2001-773	20011022
BG 106119	A	20020531	BG 2001-106119	20011120
PRIORITY APPLN. INFO.:			GB 1999-9472	A 19990423
			GB 1999-12197	A 19990525
			EP 2000-920889	A3 20000419
			WO 2000-GB1514	W 20000419

ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it: (i) provides an IR spectrum contg. peaks at 1360, 1326, 1241, 714 and 669 cm⁻¹; and/or (ii) provides a Raman spectrum contg. peaks at 1581, 768, 670, 271 and 226 cm⁻¹; and/or (iii) provides a solid-state NMR spectrum contg. peaks at chem. shifts substantially; and/or (iv) provides an x-ray powder diffraction (XRPD) pattern contg. peaks; a process for prepg. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

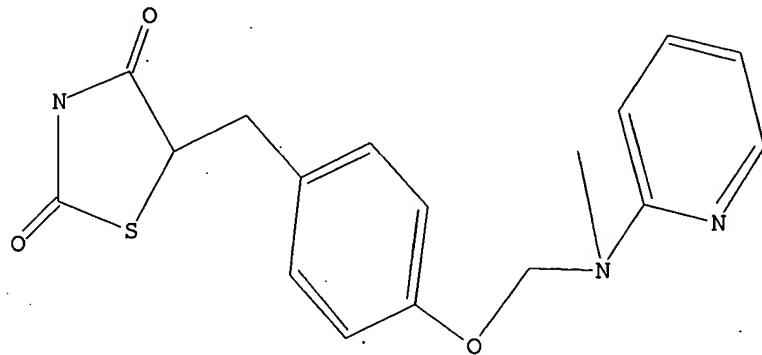
SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
IR spectroscopy
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)
INDEX TERM: 168553-12-6
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)

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L1 STRUCTURE uploaded

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BATCH **COMPLETE**
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PROJECTED ANSWERS: 0 TO 0

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FULL SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

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maleic acid
MISSING OPERATOR '5-[4-[2-(N-METHYL-N'

=> s "5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione"
L4 1 "5-[4-[2-(N-METHYL-N-(2-PYRIDYL)AMINO)ETHOXY]BENZYL]THIAZOLIDINE

-2,4-DIONE"

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ENTRY SESSION
FULL ESTIMATED COST 208.03 208.24

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FILE COVERS 1907 - 1 Jul 2003 VOL 139 ISS 1
FILE LAST UPDATED: 30 Jun 2003 (20030630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L6 6 L5 AND POLYMORPH?

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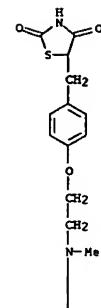
L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:434558 CAPLUS
 DOCUMENT NUMBER: 139:12309
 TITLE: Rosiglitazone edisylates and their use as antidiabetics
 INVENTOR(S): Ho, Tim Chien Ting; Millan, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIKKDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200305947	A1	20030605	WO 2002-GB5239	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MA, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, HD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HL, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2001-27931	A 20011121
			GB 2001-27932	A 20011121
			GB 2001-27933	A 20011121

AB A salt of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione and 1,2-ethanedisulfonic acid, a process for the prepn. of the salt, pharmaceutical compns. comprising the salt and the use of the salt in medicine as antidiabetics are described.
 IT 122320-73-4, Rosiglitazone
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. and properties of rosiglitazone edisylate polymorphs
 as antidiabetics)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

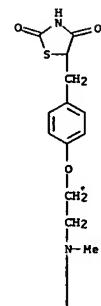
L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:434557 CAPLUS
 DOCUMENT NUMBER: 139:12309
 TITLE: Preparation of polymorphs of 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione benzenesulfonate for pharmaceuticals
 INVENTOR(S): Craig, Andrew Simon; Millan, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 47 pp.
 CODEN: PIKKDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200305946	A1	20030605	WO 2002-GB5232	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MA, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, HD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HL, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2001-27934	A 20011121
			GB 2001-27935	A 20011121
			GB 2001-27936	A 20011121
			GB 2001-27937	A 20011121

AB A 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione benzenesulfonate (I) or a solvate, a process for the prepn. of the salt, and pharmaceutical compns. comprising the salt are disclosed. A mixt. of THF and 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione was heated to 50 degrees, and treated with benzenesulfonic acid was added to the soln. to give I. I was characterized by spectroscopic and X-ray methods.
 IT 122320-73-4, 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of polymorphs of methyl(pyridyl)aminoethoxybenzylthiazolidinedione salt for pharmaceuticals)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A

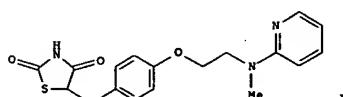


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2002:504785 CAPLUS
 DOCUMENT NUMBER: 137:83621
 TITLE: Preparation and use of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione methanesulfonate
 INVENTOR(S): Craig, Andrew Simon; Ho, Tim Chien Ting; Millan, Michael; O'Keeffe, Deirdre
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 41 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051839	A1	20020704	WO 2001-G85751	20011221
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, EC, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZB, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2000-31521	A 20001222
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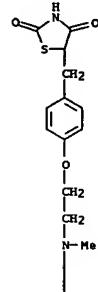


I

AB A compd. 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione (I) or solvate thereof; a process for prep. I, a compn. comprising I and its therapeutic use is disclosed. Four polymorphic forms were prep'd. and characterized. For instance, MeOH (0.54 mL) was added to a mixt. of (3.0 g) in EtOAc (60 mL) and was heated with agitation to reflux to give a suspension. The resulting mixt. was cooled to 21-degree-C. the solid formed collected by filtration, washed with EtOAc and dried under vacuum for 16 h (3.73 g yield). Polymorphic forms I-IV were characterized by at least one of the following means: aq. solv., m.p., ¹H-NMR (soln.), ¹³C-NMR (solid state), IR/Raman spectra, XRPD and DSC. II is a stable solid with

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)
 good water solv., desirable flow properties and is amenable to large scale processing (filling). II is useful for the prevention/treatment of diabetes mellitus.
 IT 122320-73-4, 5-[4-(2-(N-Methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactants, prep., and characterization of 5-[4-(2-(N-Me-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione methanesulfonate)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

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REFERENCE COUNT: 2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2002:256258 CAPLUS
 DOCUMENT NUMBER: 136:299681
 TITLE: Novel polymorphic forms of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione maleate and process for their preparation
 INVENTOR(S): Chelliyam, Prabhakar; Mamillapalli, Ramabhadra Sarma; Keishnamurthy, Vyasa Seela; Vishnuvardhan Reddy; Gaddam, Om Reddy
 PATENT ASSIGNEE(S): Reddy's Research Foundation, India; Cord, Janet I.
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIIX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002026737	A1	20020404	WO 2001-US29996	20010925
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EC, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZB, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
AU 2001091232	A5	20020408	AU 2001-91232	20010925
PRIORITY APPLN. INFO.:			IN 2000-MA805	A 20000926
			WO 2001-US29896	V 20010925

AB This invention relates to novel polymorphic/pseudopolymorphic forms of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione maleate (I). The invention also relates to a pharmaceutical compn. comprising the novel polymorphic form or their mixt. and a pharmaceutically acceptable carrier. The polymorphic forms of the present invention are more active, as antidiabetic agent, than the hitherto known 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione maleate. I was dissolved in ethanol and was allowed to cool to room temp. over a period of 18 h to yield 80% of >99% pure polymorphic form of I.

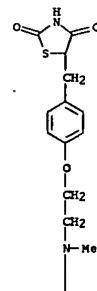
IT 122320-73-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (novel polymorphic forms of triazolidinedione maleate and process for their prepn.)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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REFERENCE COUNT: 6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2001:724003 CAPLUS
 DOCUMENT NUMBER: 136:79548

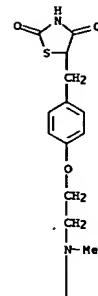
TITLE: Inhibition of RXR and PPAR. γ . ameliorates diet-induced obesity and type 2 diabetes
 AUTHOR(S): Yamauchi, Toshiyuki; Waki, Hironori; Kamon, Junji;
 Murakami, Koji; Motojima, Kiyoto; Komeda, Kazuro;
 Miki, Hiroshi; Kubota, Naoto; Terauchi, Yasuo;
 Tsuchida, Atsuko; Tsuboyama-Kasaoka, Nobuyor; Yamauchi,
 Naoko; Ide, Tomohiro; Horii, Wataru; Kato, Shigeaki;
 Fukayama, Masashi; Akanuma, Yasuo; Ezaki, Osamu; Itai,
 Akiko; Nagai, Ryozo; Kusuda, Satoshi; Tobe, Kazuyuki;
 Kagechika, Hiroyuki; Shudo, Koichi; Kadokawa, Takashi
 CORPORATE SOURCE: Department of Internal Medicine, Graduate School of
 Medicine, University of Tokyo, Tokyo, 113-0655, Japan
 SOURCE: Journal of Clinical Investigation (2001), 108(7),
 1001-1013
 CODEN: JCINAO; ISSN: 0021-9738
 PUBLISHER: American Society for Clinical Investigation
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB PPAR. γ . is a ligand-activated transcription factor and functions as a heterodimer with a retinoid X receptor (RXR). Supraphysiolog. activation of PPAR. γ . by thiazolidinediones can reduce insulin resistance and hyperglycemia in type 2 diabetes, but these drugs can also cause wt. gain. Quite unexpectedly, a moderate redn. of PPAR. γ . activity obsd. in heterozygous PPAR. γ .-deficient mice or the Pro12Ala polymorphism in human PPAR. γ ., has been shown to prevent insulin resistance and obesity induced by a high-fat diet. In this study, we investigated whether functional antagonism toward PPAR. γ ./RXR could be used to treat obesity and type 2 diabetes. We show herein that an RXR antagonist and a PPAR. γ . antagonist decrease triglyceride (TG) content in white adipose tissue, skeletal muscle, and liver. These inhibitors potentiated leptin's effects and increased fatty acid combustion and energy dissipation, thereby ameliorating Hf diet-induced obesity and insulin resistance. Paradoxically, treatment of heterozygous PPAR. γ .-deficient mice with an RXR antagonist or a PPAR. γ . antagonist depletes white adipose tissue and markedly decreases leptin levels and energy dissipation, which increases TG content in skeletal muscle and the liver, thereby leading to the re-emergence of insulin resistance. Our data suggested that appropriate functional antagonism of PPAR. γ ./RXR may be a logical approach to protection against obesity and related diseases such as type 2 diabetes.

IT 122320-73-4, Rosiglitazone
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhibition of RXR and PPAR. γ . ameliorates diet-induced obesity and type 2 diabetes)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)met
 hyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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REFERENCE COUNT:

55

THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

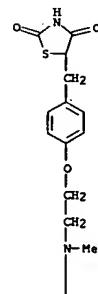
L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1999:437778 CAPLUS
 DOCUMENT NUMBER: 131:197757
 TITLE: Loss-of-function mutations in PPAR. γ . associated with human colon cancer
 AUTHOR(S): Sarral, Paschal Mueller, Elisabetta; Smith, Wendy M.; Wright, Harriet M.; Kurn, Jennifer B.; Aaltonen, Lauri A.; De la Chapelle, Albert; Spiegelman, Bruce M.; Eng, Chazris
 CORPORATE SOURCE: Department of Cancer Biology Dana-Farber Cancer Institute Department of Cell Biology, Harvard Medical School, Boston, MA, 02115, USA
 SOURCE: Molecular Cell (1999), 3(6), 799-804
 CODEN: MOCEFL; ISSN: 1097-2765
 PUBLISHER: Cell Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The gamma isoform of the peroxisome proliferator-activated receptor, PPAR. γ ., regulates adipocyte differentiation and has recently been shown to be expressed in neoplasia of the colon and other tissues. The authors have found four somatic PPAR. γ . mutations among 55 sporadic colon cancers: one nonsense, one frameshift, and two missense mutations. Each greatly impaired the function of the protein. C.472delA results in deletion of the entire ligand binding domain. Q286L and K319X contain a total or partial ligand binding domain but lose the ability to activate transcription through a failure to bind to ligands. R288H showed a normal response to synthetic ligands but greatly decreased transcription and binding when exposed to natural ligands. These data indicate that colon cancer in humans is assoc'd. with loss-of-function mutations in PPAR. γ .

IT 122320-73-4, BRL 49653
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (loss-of-function mutated PPAR. γ . assoc'd. with human colon cancer binding of and transactivation response to)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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28

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

29.36

237.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

CA SUBSCRIBER PRICE

-3.91

-3.91

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7/01/2003

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3	18717	polymorph\$	USPAT	2003/07/01 15:28
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7	683	546/269.7, 514/342 and malic\$	USPAT	2003/07/01 15:28
4	58	(546/269.7, 514/342) and polymorph\$	USPAT	2003/07/01 15:28
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